

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A polymer ~~solid~~ electrolyte ~~type~~ fuel cell comprising;
an ion exchange membrane made of a proton conductor,
a fuel electrode provided on one side of the ion exchange membrane,
an oxidizer electrode provided on the other side of the ion exchange membrane,
at least one internal electrode provided in the ion exchange membrane, and
a voltage application device for applying voltage to the internal electrode ~~which is~~
~~configured in order~~ to control an electrode potential of the internal electrode by connecting a
power source between the internal electrode and one of the fuel electrode and the oxidizer
electrode.

Claim 2 (Cancelled).

Claim 3 (Previously Presented): The fuel cell according to Claim 1, wherein the
voltage application device is a device for connecting, by way of one of a conductive member
and a load, between the internal electrode and one of the fuel electrode and the oxidizer
electrode.

Claim 4 (Original): The fuel cell according to Claim 1, wherein the internal electrode
is layered structure.

Claim 5 (Cancelled).

Claim 6 (Original): The fuel cell according to Claim 1, wherein hydrogen or methanol is used as a fuel.

Claim 7 (Currently Amended): A method of controlling a polymer solid electrolyte type fuel cell having an ion exchange membrane made of a proton conductor,

a fuel electrode provided on one side of the ion exchange membrane,

and an oxidizer electrode provided on the other side of the ion exchange membrane,

the method comprising:

a step of controlling applying voltage capable of oxidizing the fuel or reducing the oxidizer on an internal electrode provided in the ion exchange membrane in order to control a
movement of a fuel or oxidizer permeated in the ion exchange membrane ~~by providing at least one internal electrode in the ion exchange membrane and applying voltage capable of oxidizing the fuel or reducing the oxidizer on the internal electrode.~~

Claim 8 (Cancelled).

Claim 9 (Previously Presented): The method of controlling a fuel cell according to Claim 7, wherein the method further comprises:

a step of suppressing a generation of radicals in the fuel cell by preventing the mixture and reaction of the excess permeated oxidizer to the fuel electrode and the fuel, or by preventing mixture and reaction of the excess permeated fuel to the oxidizer electrode and the oxidizer.

Claim 10 (Previously Presented): The fuel cell according to Claim 1, wherein both the fuel electrode and the oxidizer electrode are in direct contact with different sides of the ion exchange membrane.

BASIS FOR THE AMENDMENT

Claims 1, 3-4, 6-7, 9 and 10 are active in the present application. Claims 2, 5 and 8 are canceled claims. Independent Claims 1 and 7 have been amended to make it clear that the claimed invention is a polymer electrolyte fuel cell.

No new matter is added.